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EXAMINER

GISHNOCK, NIKOLAI A

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/803,806	Applicant(s) MARGGRAFF ET AL.	
	Examiner NIKOLAI A. GISHNOCK	Art Unit 3715	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37-72 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 37-72 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 January 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/29/2009 (x4), 3/12/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In response to Applicant's remarks filed 1/30/2009, claims 1-36 are cancelled. Claims 37-72 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 37, 40-49, 53-61, & 64-72 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Margraff et al. (WO 01/83213 A1), hereinafter known as Margraff.
4. Margraff teaches a computing device, method, and computer readable media for providing instructional response (the user may be tested on the subject matter provided by the article in the print medium. The user may be given a pop quiz such as a multiple choice test to test the user on his retention of the subject matter of the article in the print medium. For instance, in this particular example, the user can be tested with multiple choice questions on the subject matter of the wine article recently read. Consequently, the invention can assist a user in retaining information that he has read, page 29, lines 8-13), the computing device comprising: an input device for accepting an unstructured user input (the user may use a stylus to select numbers on an alpha-numeric keyboard disposed on the print media receiving unit. [T]he stylus or other device can be used to scan the page number of the print medium. [A] strip of numbers (0 to 9) may be present on the print media receiving unit and the user may select the page number using a stylus by selecting the corresponding combination of numbers. [A]n indicator

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such as a "go" circle may be present on the borders of the pages of the print medium. When the indicator is selected by the user, the position of the indicator can be determined by the electronic position determining system and that position may correspond to a particular page in the print medium, page 21, lines 14-25; the user input is understood to be unstructured, as the input is not constrained to be of any particular type; further the user may interact in any way they wish) by reading a plurality of substantially invisible codes, wherein said plurality of substantially invisible codes are printed on a surface (The pages of the print media may comprise any suitable substrate material including paper or plastic. Print elements such as letters, figures, drawings, icons, symbols, pictures, etc. may be printed on the substrate material using any suitable ink, dye, or other print material. The print in the printed medium is preferably permanently affixed to the substrate material as is ink on paper. The print medium may even be a transparency sheet with printed matter, page 9, lines 4-19; a transparent sheet is understood to be "substantially invisible" as disclosed by Applicant, who requires only that the print be not easily discernable to a human see page 5, paragraph 28 of the specification); a processor for processing said user input (page 24, line 7 through page 25, line 3), wherein said processing comprises: recognizing a plurality of print elements associated with said plurality of substantially invisible codes (the processor may be a component in an electronic position determining system, which can be used to determine the location of a selected portion of a print medium disposed on the print media receiving unit. The processor may store instructions for calculating the position of the stylus over the print media receiving unit, page 24, line 7 through page 25, line 3); and in response to said recognizing, determining said instructional response (Using the position of the portion of the print medium selected by the user and an electronic copy of the print medium, the particular printed matter selected by the user can be determined by the system. An electronic position determining system can determine the position of a portion

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selected by a user, and a processor can determine the actual phrase, picture, etc. selected by the user using the position information and the electronic copy of the print medium. [T]he printed media receiving unit can determine both the position of the selected portion as well as the actual phrase, picture, etc. selected by the user, page 21, lines 1-13), wherein said instructional response is an instruction from said computing device for use by a user of said computing device (the publisher of a print medium capable of being used to play a game (e.g., a crossword puzzle) may provide auxiliary information about the game to be played (e.g., hints, facts about an identified word, etc.). [A]fter a typical content package is sent to the print media receiving unit, the unit may ask the user to provide responses to a number of queries. Examples of requested information may include the user's opinion regarding a certain subject, answers to a quiz, etc., page 14, line 26 through page 15, line 24); and an output device for outputting said instructional response (Any suitable audio or visual output devices may be associated with the print media receiving unit. Examples of visual output devices include display devices such as video screens, monitors, televisions, or LCDs. The audio output devices may produce primarily audio output. Examples of audio devices include speakers, earphones, headphones, voice synthesizers, etc., page 24, lines 6-15), wherein said input device, said processor and said output device reside in a same housing (FIG. 7 shows a schematic diagram of the print media receiving unit. Electronic elements forming part of the electronic position locating system are embedded under the print media receiving unit on each side of the hinge. An alpha-numeric input region can be provided on the print media receiving unit to permit a user to enter data into the receiving unit. On the left hand panel of the print media receiving unit, three examples of icons are illustrated. These icons might be used by the user to make special requests. Any number of icons could be used for additional options, and the icons may be printed on a surface of the print media receiving unit. The right side of the print media receiving unit includes an

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optional speaker which is physically integrated into the print media receiving unit. In use, the user may place the tip of stylus on a portion of the print medium and auxiliary information relating to the selected portion can be sent to the print media receiving unit and may be audibly recited to the user, page 25, line 21 through page 26, line 15; see also Figure 7) [Claims 37, 49, & 61].

5. Margraff teaches a stylus having an optical detector for detecting said plurality of substantially invisible codes printed on said surface ([A]n optical detector can be used [for the electronic detection system]. The print media receiving unit may include a frame around a flat surface. The print medium can be disposed under the frame and on the flat surface. An array of light emitters and detectors can be around the inner edges of the frame. When a finger or a stylus is near the print medium and interrupts light coming from the light emitters, the position of the selection can be determined, page 22, line 26 through page 23, line 3), a processor coupled to the optical detector (the processor is preferably disposed within the print media receiving unit. The processor may be a component in an electronic position determining system, which can be used to determine the location of a selected portion of a print medium disposed on the print media receiving unit, page 24, lines 27-32; The stylus and an antennae system embedded within the print media receiving unit may interact and determine the particular location of the printed matter selected by the user, page 21, line 26 through page 22, line 25, the processor and optical detector are understood to be coupled through the print media receiving unit); and a memory unit comprising code for audio outputs corresponding to the print element (The print media receiving unit may also include a writeable memory device, [such as] a programmable ("flash") memory or other volatile memory device. The writeable memory device can store any suitable information. For example, electronic maps of print media, as well as auxiliary information for selected print elements in the print media can be stored in the writeable memory

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device, page 23, lines 4-13; the auxiliary information is understood to be audio data) [Claims 40, 52, & 64].

6. Margraff teaches wherein the output device is an audio output device operable to output an audio instructional response based on said unstructured user input and in accordance with codes residing within said computing device, and wherein the output device is configured to generate an audio output related to a user created print element on said surface, wherein said surface is a writing surface (auxiliary information may be music or voice data that is capable of being converted to music or speech at the user's site. For example, a speaker associated with the print media receiving unit can transfer music, voice or data into sound. The auxiliary information may also comprise text or other graphic material that can be displayed on a display device at the user's site. In some embodiments, the auxiliary information consists primarily of, or solely of, audio information, page 13, line 8 through page 14, line 10; the print media receiving unit is understood to be a writing surface, page 3, lines 1-7) [Claims 41, 44, 53, 56, 65, & 68].

7. Margraff teaches wherein a task and an audio instructional response is audibly presented to the user by the audio output device, and wherein the instructional response relates to a task presented to the user (touching the stylus to a musical note symbol in a short boxed story on tempered musical scales, might cause an application program to be downloaded. The application program may be run on the print media receiving unit. When run, the program causes a device to illustrate the concept of different tonal tempering, and may ask the user to distinguish between half tones and whole tones, page 14, lines 19-25) [Claims 42, 43, 47, 54, 55, 59, 66, 67, & 71].

8. Margraff teaches wherein the plurality of substantially invisible codes at a plurality of positions is operable to determine a location of a plurality of print elements on the surface (an electronic detection system can be used to determine that the user has made a selection. The

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electronic detection system is preferably an electronic position determining system which can be used to determine the position of portions of a print medium selected by a user, page 8, lines 12-15) [Claims 45, 57, & 69].

9. Margraff teaches wherein the unstructured user input is a non-keyboard user input (a user can use a stylus to select (for example, by touching) a symbol for a stock on the print medium while it is disposed on the print media receiving unit, page 5, lines 6-15) [Claims 46, 58, & 70].

10. Margraff teaches a writing device and wherein the processor, input device, output device and writing device form a housing having a pen-like appearance (A stylus may be tethered to a print media receiving unit to form a print media receiving unit assembly. [T]he stylus is illustrated as being mechanically coupled to the print media receiving unit, page 25, lines 15-20; see also Figure 7, Items 2 & 4) [Claims 48, 60, & 72].

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. Claims 38, 39, 51, 52, 62, & 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Margraff, in view of Kardach (US 2003/0001020 A1), hereinafter known as Kardach.

14. Margraff teaches all the features of claims 37, 49, & 61, as demonstrated above. What Margraff fails to teach is wherein the unstructured user input comprises a print element created by the user on said surface [Claims 38, 50, & 62], and a writing element [Claims 39, 51, & 63]. However, Kardash teaches A method and apparatus are disclosed for taking an electronic application programs such as, for example, PowerPoint, Outlook, Windows, and Word of Microsoft Corporation of Redmond, Wash., and printing them on a piece of paper having a preprinted pattern thereon, thereby creating a hardcopy representation. The hardcopy representation of the application includes identification information (e.g., a unique ID). The identification information associates the application printed on the page with the preprinted pattern on the paper. Using a special pen, edits may be made to the hardcopy representation. The pen records these edits and sends the updates to a computer system automatically. In response to the receiving the edits, the computer system updates the electronic application automatically (Abstract). a pen that may be used to make edits to the hardcopy representation. Such a pen is similar to an Anoto pen. The pen includes an inkwell for dispensing ink from the pen, a camera to create images of the unique pattern (e.g., Anoto pattern) on the hardcopy representation as well as the ID, and a processor coupled to the camera to control the operation of the camera. Processor is also coupled to memory to store the images created by camera. A transceiver is coupled to memory to send captured images and other information to a computer

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system. A battery powers the components in the pen. When the pen draws a line across the ID icon, it reads the ID pattern and then the paper pattern, which are both part of this larger pattern discussed above. The ID icon pattern location will be associated with the printed application, while the paper pattern will be associated with a blank page function. When the pen recognizes a pen stroke between these two pattern areas, the local composer will then associate that paper pattern with the meaning assigned it via the ID pattern. During the creation of the paper application (i.e., when it was printed), the computer will have stored paper pattern information associated with the functions to be performed (e.g., writing in this pattern area means to create an appointment), (Para. 0033-34, see also Figure 5, Item 501). The stylus taught by Margraff would contain an ink writing element disposed therein, to be used in the manner taught by Kardash for editing a document electronically with a visible, written pen stroke. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have implemented the ink writing element disposed in the pen taught by Kardash, for a user to create an unstructured user input print element on the writing surface taught by Margraff, in order to associate a printed piece of paper with an application in an ad-hoc fashion [Claims 38, 39, 51, 52, 62, & 63].

15. Claims 37-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook, in view of Nagasaki et al. (US 5,896,403), hereinafter known as Nagasaki.

16. Silverbrook discloses a computing device for providing instructional response, and a method and computer readable media for implementing a method, the media having computer readable code which when executed by a processor of a computing device cause the computing device to perform a method for providing instructional response (Instructional responses are further understood to be questions, Silverbrook teaches a user responding to questions during an examination, 4:40-5:5; also at 45:61-48:6), comprising: an input device for accepting an

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unstructured user input (system includes a sensing device to convey data from the form to the computer system and to contribute additional data. The sensing device is configured as a pen, which is designed to be able to physically mark the interactive form as well as to selectively enable the coded data from the form to be read and transmitted to the computer system. The coded data then provides control information, configured such that designation thereof by a user causes instructions to be applied to the software running on the computer system or network, 3:58-4:2; unstructured user input is understood as such: A free response examination paper allows the input of numeric expressions, values or text. The system may employ text conversion to allow the system to evaluate the response automatically, and unrecognized input can be routed to an examiner or administrator, 4:66-5:3) by reading a plurality of substantially invisible codes, wherein said plurality of substantially invisible codes are printed on a surface (the form is disposed on sheet material such as paper or the like which has the coded data printed on it and which allows interaction with the computer system. The coded data is detectable preferably, but not exclusively, outside the visible spectrum, thereby enabling it to be machine-readable but substantially invisible to the human eye, 3:45-57); a processor for processing said user input (The pen controller chip includes a controlling processor. {The} bus enables the exchange of data between components of the controller chip, 40:51-54), wherein said processing comprises: recognizing a plurality of print elements associated with said plurality of substantially invisible codes (The controlling processor captures and decodes location data from tags from the surface via the image sensor, 40:62-64); and in response to said recognizing, determining said instructional response (the present invention provides a method of enabling examinations, including the steps of: providing a user involved in an examination exercise with an exercise form containing coded data indicative of an identity of the exercise form and of at least one reference point of the exercise form; receiving, in a computer system, response data from a

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sensing device operable by said user, said data regarding the identity of the exercise form and a position of the sensing device relative to the exercise form, the sensing device, when placed in an operative position relative to the exercise form, sensing the coded data and providing said response data from said coded data, 2:13-25; also, for each examination question, an examinee may give an answer. Each multiple-choice answer contains the chosen option number and the time the answer was written. Each essay answer has the essay content. The essay answer is handwritten by the user and is stored as digital ink, and optionally the writing may be converted to text using handwriting recognition. Each answer may have associated with it a score and a comment, 46:31-39), wherein said instructional response is an instruction from said computing device for use by a user of said computing device (for each examination question, the examinee may give an answer, 46:31-39); and an output device (net page printer, 41:51-42:52) for outputting said instructional response (Multiple choice questions can be automatically marked by the examination application. If a completed examination is printed by a marker, extra fields can optionally be printed for essay style questions to allow the marker to enter the score and comments against the answer, 48:1-6) [Claims 37, 49, & 61].

17. What Silverbrook fails to teach is where the input device, processor, and output device reside in a same housing [Claims 37, 48, 60, & 72]. However, Nagasaki clearly teaches this in Figure 55 and 46:61-47:29. It would be more convenient for the user to have all the necessary components of the pen of Silverbrook located in one housing as taught by Nagasaki. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have the input device, processor, and output device of Silverbrook reside in a same housing, as taught by Nagasaki, in order to provide added convenience and ease of user for a user [Claims 37, 48, 60, & 72].

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18. What Silverbrook further fails to teach is wherein the output device is an audio output device operable to output an audio instructional response based on said unstructured user input and in accordance with codes residing within said computing device [Claims 41, 53, & 65], and wherein the output device is configured to generate an audio output related to a user created print element on said surface [Claims 44, 56, & 68]. However, Nagasaki teaches where sound data recorded on a paper sheet is read by a pen type information reproducing apparatus. The user traces the dot code with the pen type information reproducing apparatus to detect the dot code. Upon conversion of the dot code into a sound, the user can hear the sound through a speech output device such as an earphone. The overall information reproducing apparatus of this embodiment is housed in a portable pen type housing. Nagasaki further teaches a loudspeaker incorporated in the housing (9:60-10:8, see also Figures 2B & 3). Nagasaki teaches digital code data for implementing the restoring means for converting a dot code into multimedia information, which stores the dot code in memory, detects the marker of each block from the stored dot code, detects data array direction from the detected marker of each block, and outputs, by the first address control means, the dot code stored in the first memory in accordance with the detected data array direction (3:39-4:17). The audio instructional response is thus understood to be based on the user input reading the dot code and in accordance with the digital code for interpreting the information. The loudspeaker for reproducing and outputting sound information, based on a code printed on paper, as taught by Nagasaki, would be incorporated into the pen of Silverbrook for generating and outputting the audio clip tags associated with a user's writing, as taught by Silverbrook. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have an audio output device form a housing having a pen-like appearance, configured to generate an audio output related to a user created print element on said surface, as taught by Nagasaki, included

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in the pen housing having a processor, input device, and writing device, as in Silverbrook, wherein the writing surface has a plurality of substantially invisible codes on a paper writing surface, at a plurality of positions for determining is operable to determine a location of a plurality of print elements on the surface, further operable to output an audio instructional response based on said unstructured user input and in accordance with codes residing within said computing device, in order to allow inexpensive, large-capacity recording and repetitive reproduction of multimedia information, including audio information, to be easily transmitted by a paper-printing apparatus, such as a fax machine or printer [Claims 41, 44, 48, 53, 56, 60, 65, 68, & 72].

19. What Silverbrook further fails to teach is wherein a task is audibly presented to the user by the audio output device [Claims 42, 54, & 66], wherein the instructional response is an audio instructional response presented to the user by the audio output device [Claims 43, 55, & 67], and wherein the instructional response relates to a task presented to the user [Claims 47, 59, & 71]. However, Nagasaki teaches various applications of recording of audio information including teaching materials for foreign languages and language dictionaries, repair manuals, books and magazines such as picture books, guide books for travelers, fax (voice & fax) operation instructions, electronic blackboards, etc. (12:58-13:5). These various applications taught by Nagasaki are understood to audibly present a user with an instructional response in the form of a task, and would be used with the user input device of Silverbrook for accepting an unstructured written user input, recognizing a plurality of print elements, determining an instructional response, and outputting the response in an audio format. Nagasaki further teaches audio codes printed on a double-coated adhesive tape, such as a label, which peels off and is stuck on the lower surface of a roll of paper (12:58-13:5), wherein machine-readable codes are recorded in transparent ink on the upper surface of the paper (14:18-67). A required

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portion of the paper that can be cut and stuck on various things is understood to be a sticker.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used the audio tag information in the pen of Silverbrook to convey an instructional response in the form of a task to a user, as taught by Nagasaki, in order to provide instructions to a user which can be faxed, listened to, and optionally read [Claims 42, 43, 47, 54, 55, 59, 66, 67, & 71].

20. Silverbrook discloses wherein the unstructured user input comprises a print element created by the user on said surface (the sensing device is configured as a pen, which is designed to be able to physically mark the interactive form as well as to selectively enable the coded data from the form to be read and transmitted to the computer system, 3:58-4:2; also, the netpage pen operates both as a normal marking ink pen and as a non-marking stylus, 41-43) [Claims 38, 50, & 62].

21. Silverbrook discloses a writing element (an ink pen cartridge with nib and a stylus with stylus nib are mounted side by side within the housing. Either the ink cartridge nib or the stylus nib can be brought forward through open end of the metal end piece, by rotation of the pen top, 39:36-42) [Claims 39, 51, & 63].

22. Silverbrook discloses a stylus having an optical detector for detecting said plurality of substantially invisible codes printed on said surface, and a processor coupled to the optical detector (A second flex PCB, is mounted on an electronics chassis which sits within the housing. The second flex PCB mounts an infrared LED for providing infrared radiation for projection onto the surface. An image sensor is provided mounted on the second flex PCB for receiving-reflected radiation from the surface. The second flex PCB also mounts a radio frequency chip, which includes an RF transmitter and RF receiver, and a controller chip for controlling operation of the pen. An optics block sits within the cover, and projects an infrared

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beam onto the surface and receives images onto the image sensor, 39:60-40:4), and a memory unit (Flash memory and a 512 KB DRAM are also included, 40:51-54) comprising code for audio outputs corresponding to the print element (A document instance corresponds to a formatted document. It consists of a set of page instances, each of which corresponds to a page description of the formatted document. Each page instance describes a single unique printed netpage. A page instance has a background field, which is used to record any digital ink captured on the page, which does not apply to a specific input element. In the preferred form of the invention, a tag map is associated with each page instance to allow tags on the page to be translated into locations on the page. A page instance consists of a set of terminal element instances. Each formatted element has a spatial extent or zone on the page. This defines the active area of input elements such as hyperlinks and input fields. A terminal element can be a static element, {etc.} A static element can be an audio clip element with an associated audio clip object, {etc.}, 14:43-15:15; it is understood that the controlling processor captures and decodes {pen} location data from tags from the {page instance's} surface via the image sensor, 40:62-64, using the flash and DRAM memory unit, where the terminal element's location is associated with a tag, and the terminal element is associated with an audio clip object) [Claims 40, 52, & 64].

23. Silverbrook teaches wherein the plurality of substantially invisible codes at a plurality of positions is operable to determine a location of a plurality of print elements on the surface (3:58-4:2) [Claims 45, 57, & 69].

24. Silverbrook teaches wherein the unstructured user input is a non-keyboard user input (handwritten input, 4:66-5:3; also at 46:31-39) [Claims 46, 58, & 70].

25. Silverbrook teaches a writing device (39:36-42) [Claims 48, 60, & 72], and wherein a surface is a writing surface (paper, 3:45-57) [Claims 44, 56, & 68]. Silverbrook teaches wherein

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the processor, input device, and writing device form a housing having a pen-like appearance (39:10-40:23) [Claims 48, 60, & 72].

Response to Arguments

26. Applicant correctly notes that claim 50 is not rejected under Margraff. Claims 37, 40-49, 53-61, & 64-72 are rejected under Margraff.

27. Applicant's arguments filed 1/30/2009, see pages 10-14, in view of Margraff are not persuasive for the following reasons. Applicant argues at pages 10-11 that Margraff fails to teach receiving an unstructured input, because the inputs are constrained structurally as they require predetermined structure (e.g., an alpha-numeric keyboard, a scanned page number, and a selection of a number from a strip of numbers), and thus receives a structured input. However, this argument holds no weight. Applicant is compelled to point out exactly where in the specification this term is used or supported. Applicant further does not distinguish how a scanned page number, for example, is structured or is different from structured input, such as scanning a code; or how input has any predetermined structure whatsoever. Examiner's position is that there is no patentable difference between scanning a page number and scanning a code that represents a page number. Applicant argues at pages 11-12 that Margraff fails to teach that the transparent sheet print medium taught by Margraff fails to suggest scanning substantially invisible codes. However, see Applicant's specification at page 5, Para. 0028; his use of the term "substantially invisible" is broad enough to cover any visible text, composed of small dots, which are not resolved in a user's eye. This type of printing is commonly known as half-toning, and is used in anything printed in color. Margraff's transparency is understood to be a color slide, aside from being composed of a substrate which is transparent (which in itself is commonly understood to be "substantially invisible", along with any text printed on it) but further

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that any half-tone printing on it would be comprising a plurality of small dots which individually are not resolved by a user's sight, but as a whole composed the print on that medium. Thus, Margraff's print anticipates the recited "substantially invisible" codes, as interpreted by Applicant's specification. Applicant further argues at page 12 that because Margraff teaches a plurality of electronic elements under a print medium for detecting the location of a stylus that Margraff's print elements are not associated with a plurality of substantially invisible codes. However, Applicant is reading far too much into the claims. The recited claim language is "the plurality of codes at a plurality of positions is operable to determine a location...." Margraff is understood to thus teach an electronic system at a plurality of positions operable to determine the location of a print element (including the codes). Claim 37 is thus anticipated because Margraff's device recognizes the print elements are associated with substantially invisible codes, by either scanning them (like a page number) or by calculating the associated position of the print element (by detecting the location of the stylus at the time the print element is scanned, using the electronic elements). As such, Applicant's argument is not convincing because Margraff does teach where print elements are associated with scannable codes and additionally teaches where the codes are operable to determine their location in conjunction with electronic elements. Applicant argues at pages 13-14 that Margraff fails to teach where his stylus has optical detectors, or where the processor, input and output devices, and writing device forms a housing having a pen-like appearance. However, Examiner's position is that the claim language does not limit the entire invention to be housed in the same pen-like device; again, Applicant is reading limitations from the specification into the claims. Margraff does teach an apparatus comprising and having a housing, a stylus, optical detectors, processor, memory, input, and output devices. Applicant is further invited to compare his Figures 1 & 2; embodiments having both a tethered and wireless styluses are both disclosed. As such, Examiner asserts that there

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is no patentable difference by what part of the device houses what; the housing comprises a processor, input, output, and has a stylus writing device having a pen-like appearance; thus the argument is not convincing. Applicant also argues at page 13 that the print elements are not “user-created”; apparently because they pre-exist on a page. However, the print elements are understood to have been created by a user of the device; nothing in the claim recites that the same user who created the print elements is the user generating the output. Further, no step of creating a print element is even recited in Applicant’s claims. Examiner’s position is that the print elements of Margraff were created by somebody; that person is a user of the device; as such, Margraff anticipates the claim language.

28. Applicant’s arguments filed, see pages 14-19, in view of Silverbrook and Nagasaki, are not persuasive for the following reasons. Applicant argues at page 15 that the previous Office Action is contradicting previous admissions. To clarify: questions have possible answers, both correct and otherwise. Users make responses to questions. As such, the instructional responses referred to are understood to be a user’s selection of answers to the question that he feels are correct; thus they are part of the questions. Applicant further argues that the questions disclosed by Silverbrook come from the paper, rather than from the computing device, thus wherein the instructional response is an instruction from the computing device is not taught. However, Silverbrook clearly teaches where the questions are downloaded to the computing device and printed on a paper in a format to be more easily answered. Applicant fails to explain how questions come from a paper anyway. Thus, Applicant’s argument is not persuasive because the questions presented in Silverbrook appear to come from the computing device. On page 17, Applicant argues that the combination of Silverbrook and Nagasaki is inoperable, because a very small piece of paper would be required. This logic is ludicrous as the size of the paper would not prevent such a device from working. The pen of Silverbrook would merely be

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passed over a paper of any size, for scanning or printing print elements, in order to make copies of books that cannot be passed through a document feeder, for example. One of ordinary skill in the electronics arts would see the benefit of using a handheld scanner/printer; handheld copiers, such as DymoTM portable label makers, are well-known in the art. Thus, Applicant's explanation that the teachings of Silverbrook and Nagasaki cannot be successfully combined in the way of Applicant's instant invention is unconvincing because what would be apparent to one of ordinary skill in the art is to merely use the dot codes in Silverbrook for different use.

Applicant's arguments at page 18 that Nagasaki fails to teach unstructured input is the same as above; it is unconvincing because Applicant never defines what a structured input is or how a dot code is such an input. Applicant's final argument at pages 18-19 that Nagasaki asks the user to carry out every instruction in a thousand-page user's manual is completely irrelevant and also not persuasive. Nagasaki teaches providing all sorts of printed matter with instructional value, including musical scores, teaching materials, etc. Examiner's stance is that what is actually conveyed by the print elements in Applicant's invention is a mere matter of nonfunctional printed matter, unconnected to the substrate in any way; thus it does not lend substantial patentable weight to the claims. Thus, a task is understood here to be instruction the same as is disclosed by Applicant. Audibly presenting a task to the user, as claimed, is not the same as asking a user to complete a task. Further, whether a print element conveys a task or some other useful information or examples, such as in Nagasaki's teaching materials, user's manual, musical score for describing how to play a song, etc. are reasonably understood to be presenting tasks to a user. Thus, Applicant's arguments have all been considered unpersuasive.

Conclusion

29. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIKOLAI A. GISHNOCK whose telephone number is (571)272-1420. The examiner can normally be reached on M-F 11:00a-7:30p EST (8:00a-4:30p PST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan M. Thai can be reached on 571-272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

5/11/2009

/N. A. G./

Examiner, Art Unit 3715

/XUAN M. THAI/

Supervisory Patent Examiner, Art Unit 3715